



# Outline of Design and Inspection Procedures for Construction of Private Streets

---

1. All private roads shall be designed and constructed in accordance with Virginia Department of Transportation standards and specifications.
2. All roads must be designed based on actual soils testing information. The Developer will employ a geotechnical testing firm to obtain representative CBR (California Bearing Ratio) samples. The location and number of the CBR samples are to be determined by the geotechnical engineer. The geotechnical engineer will then prepare a report which shall include:
  - a. Number and location (including map) of CBR samples and test results of the samples,
  - b. Soils analysis, and
  - c. Final pavement design including any revisions to the preliminary pavement design shown on the construction drawings. A copy of the geotechnical report shall be submitted to the County Engineer for approval prior to the issuance of a land disturbing permit for the project.
3. All backfill of pipes and related structures under the pavement shall be inspected and tested by the geotechnical engineer. Each soil lift is to be a maximum of 6 inches thick and compacted to a minimum of 95% Standard Proctor Density. Every lift shall be tested and compaction results will be certified to the County.
4. Prior to placement of any fill material, the subgrade shall be proof-rolled to identify unsuitable materials. Following certification of the subgrade by the geotechnical engineer, roadway fill can be installed. All fill sections shall be constructed with a maximum lift of 6 inches, compacted to 95% density and tested by the geotechnical engineer at intervals not to exceed 500 linear feet.
5. Once the road is to grade, all subgrade surfaces shall be proof-rolled to refusal prior to placement of any of the pavement aggregate or asphalt. Inspection and certification of the acceptability of the subgrade for paving shall be provided by the geotechnical engineer.
6. All aggregate base material quality, depth and compaction shall be tested and certified by the geotechnical engineer. The stone in all roadways shall achieve 100% compaction. Stone depth shall be measured every 100 feet on alternating sides of the road.
7. Prior to placement of any asphalt, the stone shall be proof-rolled and inspected by the geotechnical engineer for acceptability for paving. Following approval of the stone base, any required tack coat shall be applied and documented by the geotechnical engineer. The asphalt shall be placed following the VDOT roller pattern and control strip procedure. All asphalt surfaces shall achieve at least 98% compaction tested every 100 feet on alternating sides.
8. Documentation shall be provided to the County Engineer throughout the construction process. Prior to the release of any performance surety, certification must be provided to the County Engineer to substantiate the release being requested. Application for final release of the surety shall be accompanied by geotechnical engineering statements and certification the subject private streets have been constructed in accordance with the approved plans and applicable VDOT standards.